

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/CA2004/001406

## A. CLASSIFICATION OF SUBJECT MATTER

According to International Patent Classification (IPC) or to both national classification and IPC

E02D-29/02

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC E02D-29/02

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

IPC E02D-17/19, 17/20 and E02B-03/06; CPC 61/51; and US 405/262, 284, 285 and 286

Electronic data base consulted during the international search (name of data base, and, where practicable, search terms used)

Canadian Patent Database  
Delphion

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5531547 (Shimada) July 2, 1996, column 3, line 32 to column 4, line 5, column 4, lines 22 - 28 and 36-40, and column 5, lines 65-67.	1, 2, 7, 8, 10
X	US 6595726 (Egan et al.) July 22, 2003, column 3, lines 24-34 and 41-56, and column 4, lines 6-16, 39-43 and 51-53.	1, 7, 8
P, X	US 6764252 (Banting) July 20, 2004, column 1, lines 33-47, column 2, lines 32-53, column 3, lines 24-27 and 49-67, and column 4, lines 3-9.	1, 8
A	JP 04080432 A2 (Koji) March 13, 1992	
A	JP 07173845 A2 (Hideo) July 7, 1995	

Further documents are listed in the continuation of Box C.

Patent family members are listed in annex.

- \* Special categories of cited documents : "T"
- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "&" document member of the same patent family

Date of the actual completion of the international-type search  
19 November 2004 (19-11-2004)

Date of mailing of the international-type search report  
26 November 2004 (26-11-2004)

Name and mailing address of the ISA/  
Commissioner of Patents  
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# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.  
PCT/CA2004/001406

Patent Document Cited In Search Report	Publication Date	Patent Family Member(s)	Publication Date
US5531547	02-07-1996	CN1101960 A GB2283038 A JP2545197B2 B2 KR172973 B1 SG50635 A1 TW403095Y Y US5531547 A	26-04-1995 26-04-1995 16-10-1996 18-02-1999 20-07-1998 21-08-2000 02-07-1996
US6595726	22-07-2003	NONE	
US6764252	20-07-2004	NONE	